

07-11-2000

-25-

## CLAIMS

1. An isolated protein having no O-glycosylation and at least 70% homology of amino acid sequence with human serum CD14.
2. A protein according to claim 1 wherein its amino acid sequence is at least about 95% homologous with the amino acid sequence of human serum CD14.
3. A protein according to claim 1 wherein its amino acid sequence is at least about 95% homologous with the amino acid sequence of bovine or buffalo CD14.
4. A protein according to any preceding claim wherein the protein has a plurality of N-glycosylation sites.
5. A protein according to claim 4 which comprises from about 3 to about 5 N-glycosylation sites.
6. A protein according to any preceding claim wherein the presence of the protein is not revealed in a Western blot by the known commercially available anti-CD14 monoclonal antibody MY4.
7. A protein according to any preceding claim isolated from mature human, bovine or buffalo milk.
8. A method of production of a protein according to any preceding claim which comprises isolating it from mature milk.
9. A composition which comprises a protein according to any one of claims 1 to 7 excluding mature milk.
10. A composition according to claim 9 which comprises a physiologically

-26-

acceptable carrier, adjuvant or diluent.

11. A composition according to claim 9 or 10 which comprises a casein fraction and milk fat.
12. A composition according to any one of claims 9 to 11 which comprises a lipopolysaccharide binding protein (LBP), decay accelerating factor (DAF, CD55), bactericidal permeability increasing factor (BPI) or a mixture thereof.
13. A composition according to any one of claims 9 to 12 in the form of an infant formula or enteral composition.
14. A composition according to any one of claims 9 to 13 which comprises at least 25µg/ml of a protein according to any one of claims 1 to 7.
15. A method of production of a composition according to any one of claims 9 to 14 which comprises adding a protein according to any one of claims 1 to 7.
16. Use of a CD14 variant or fragment that retains the bioactivity of CD14 in the manufacture of a nutritional product or medicament for the treatment or prevention of a GI tract disorder.
17. Use according to claim 16 wherein the GI tract disorder is selected from the group which comprises inflammatory bowel disease, Crone's disease, ulcerative colitis, coeliac disease, intestinal bacterial overgrowth, chronic hepatitis, necrotising enterocolitis, neonatal sepsis, infectious diarrhoea, disbalance of the intestinal microflora, allergic reactions to food and bacterial translocation from the gut to other compartments of the body.
18. A method of treatment or prevention of a GI tract disorder which comprises administering an effective amount of a CD14 variant or fragment thereof which

-27-

retains the bioactivity of CD14.

19. A method of treatment according to claim 18 wherein the GI tract disorder is selected from the group which comprises inflammatory bowel disease, Crone's disease, ulcerative colitis, coeliac disease, intestinal bacterial overgrowth, chronic hepatitis, necrotising enterocolitis, neonatal sepsis, infectious diarrhoea, disbalance of the intestinal microflora, allergic reactions to food and bacterial translocation from the gut to other compartments of the body.

*add  
AI*